

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:
	:
Toshihiro Kobayashi	: Confirmation No. 6661
	:
U.S. Patent Application No. 10/518,288	: Group Art Unit: 2835
	:
Filed: February 15, 2006	: Examiner: Wright, Ingrid D

For: Case for Computer and Method of Producing the Case

AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated February 14, 2008 please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begins on page 9 of this paper.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Currently Amended) A case for computer comprising

(1) a first unit case, which has a solid shape into which are installed at least a bay for external storage module and a bay for boards, including a motherboard,

(2) a second unit case, which has a solid shape into which is installed a bay for power module, and

(3) a third unit case, which has a solid shape into which is installed a bay for internal storage module, wherein

~~((1) the outer panels are removably installed by using screws on outside of frame members that form outline of each of the solid shape of the first, second, and third unit cases (2)~~

((1) the frame members that form outline of each solid shape of the first, second, and third unit cases comprise,

(a) inner frames that are arranged so as to form outline of each plane of the solid shape,

(b) corner parts that are arranged at corners of the inner frames and that connect the adjacent inner frames,

(c) outer frames that bridge the adjacent corner parts and are affixed onto the inner frames,

~~[[(3)]]~~ ((2) the inner frames, the corner parts, and the outer frames are assembled by using screws, so that the case is easy to disassemble,

((3) outer panels are removably installed by using screws on six outer planes of the frame members that forms outlines of rectangular parallelepiped shapes of the second and third unit cases, and

((4) outer panels are removably installed by using screws on respective outer planes of

the frame members of the first unit case, and the second and third unit cases are assembled so that a computer as a whole has a solid parallelepiped shape.

3. (Original) A case for computer as described in claim 2, wherein the second and third unit cases can be affixed onto the rear of the first unit case.

4. (Cancelled)

5. (Currently Amended) A case for computer having a solid shape formed by a plurality of outer panels assembled together, and into which are installed bays for mounting modules for computer,

comprising at least switches and insertion/removal openings for external storage modules on front side and at least connectors on rear side;

wherein

(1) the frame members that form outline of the solid shape, comprise

(a) outer frames that are arranged so as to form outline of each plane of the solid shape,

(b) corner parts that are arranged at corners of the solid shape and that connect adjacent outer frames,

(2) [(3)] the outer frames and the corner parts are assembled by using screws, so that the case is easy to disassemble

(3) [(4)] the outer panels are removably installed by using screws on outside of the corner parts of the frame members,

(4) a disk-drive bay in which a plurality of a large disk drives serving as an internal and external storage modules can be installed, with disk-drive bay comprising:

(i) a pair of left-side and right-side first angle panels that (a) are arranged across two vertically stacked large disk drives and sustain the two drives from their respective sides, and (b) affixed to top face of a bay-fixing panel that is affixed to an outer frame that forms bottom plane of the case, and

(ii) a plurality of left-side and right-side second angle panels that (a) are sequentially arranged across adjacent two of a plurality of vertically stacked large disk drives that are placed on the afore-mentioned upper large hard disk drive, and (b) sustain the two adjacent drives from their respective sides.

6. **(Currently Amended)** A case for computer as described in claim 5, wherein

a disk-drive bay in which a plurality of large and small disk drives serving as internal and external storage modules can be installed under the condition that they are stacked, with the disk-drive bay comprising:

~~(1) a pair of left-side and right-side first angle panels that (a) are arranged across two vertically stacked large disk drives and sustain the two drives from their respective sides, and (b) affixed to top face of a bay-fixing panel that is affixed to an outer frame that forms bottom plane of the case,~~

~~(2) a plurality pairs of left-side and right-side second angle panels that (a) are sequentially arranged across adjacent two of a plurality of vertically stacked large disk drives that are placed on the aforementioned upper large hard disk drive, and (b) sustain the two adjacent drives from their respective sides, and~~

~~(3) left-side and right-side third angle panels that (a) sustain a small disk drive that is stacked atop the uppermost large disk drive from its respective sides, and (b) are affixed respectively to the left-side and right-side second angle panels that are arranged at the uppermost large disk drive,~~

and wherein

a plurality of second angle panels that have the same shape as the aforementioned second angle panels, can be installed consecutively (1) by being arranged across vertically adjacent two of a plurality of third left-side and right-side third angle panels that have the same shape as the aforementioned third angle panels, and that sustain one by one a plurality of small disk drives that are stacked successively on top of the aforementioned small disk drive from their respective sides, and

(2) by fixing the two adjacent third angle panels, and
a plurality of aforementioned large and small disk drives are stacked, through (a) the pair of the left-side and right-side first panels, (b) the plurality pairs of the second, left-side and right-side panels, and (c) the left-side and right-side third angle panels, being affixed to the panels by using screws, so that the case is easy to disassemble.

7. **(Original)** A case for computer as described in claim 6, wherein
(1) the first angle panels

(a) have a fixing flange to be affixed to top face of the bay-fixing panel by using screws, and (b) have flat installing portions that are installed consecutively to the fixing flange and are inflected into L-shaped cross-section and

are arranged across the two vertically adjacent large hard disk drives and are affixed to the sides of the two drives by using screws,

(2) the second angle panels have flat installing portions that are arranged across the two vertically adjacent large hard disk drives and are affixed to the sides of the two drives by using screws,

(3) the left-side and right-side third angle panels have

(a) flat installing portions that are installed, by using screws, to their respective sides of a small disk drive that is stacked on the uppermost of the stack of large disk drives, and (b) fixed parts that are installed consecutively to the flat installing portions of the third angle panels and are inflected into a crank-shaped cross-section so as to protrude outwards to both left and right sides and that are to be affixed, by using screws, to the flat installing portions of the second left-side and right-side angle panels that are arranged atop the uppermost large disk drives,

and that is such that

(4) the flat installing portions of the second angle panels and the fixed parts of the left-side and right-side third angle panels can be arranged across and connected with vertically adjacent two each other.

8. (Original) A case for computer as described in claim 7, wherein

(1) engagement parts on upper end of the flat installing portions of the first angle panels and lower end of the flat installing portions of the second angle panels so as to fix position at which the first and second panels contact each other, and

(2) other engagement parts on the upper end of the flat installing portions of the second angle panels and the lower end of the flat installing portions of the other second angle panels, which are arranged in such a way that said other second angle panels are adjacent to each other, so as to fix position at which said first and second angle panels contact each other.

9. (Original) A case for computer as described in claim 6, wherein a disk-drive bay in which at least one of each large and small disk drives can be installed under the

condition that they are stacked, with said disk-drive bay comprising

(1) a pair of left-side and right-side first angle panels that sustain the large disk drive(s) from their respective sides, and affixed to bottom face of a bay-fixing panel that is affixed to an outer frame that forms top plane of the case

(2) left-side and right-side third angle panels that (a) hold a small disk drive that is placed at the bottom of the large disk drive from its respective sides, and (b) are affixed respectively to the left-side and right-side first angle panels

(3) the large and small disk drives are stacked, through pairs of said left-side and right-side first and third angle panels, being affixed to the panels by using screws, so that the disk drives can easily be removed.

10. (Original) A case for computer as described in claim 9, wherein the pair of left-side and right-side first angle panels and left-side and right-side third angle panels as described in claim 9, with said first angle panels having the same shape as those of the first angle panels in claim 7 or claim 8, and said third angle panels having the same shape as the left-side and right-side third angle panels in claim 7.

11-12. (Cancelled)

13. (New) A case for computer having a solid shape formed by a plurality of outer panels assembled together, and into which are installed bays for mounting modules for computer, comprising at least switches and insertion/removal openings for external storage modules on front side and at least connectors on rear side; wherein

(1) the frame members that form outline of the solid shape, comprise,

- (a) outer frames that are arranged so as to form outline of each plane of the solid shape, and
- (b) corner parts that are arranged at corners of the solid shape and that connect the adjacent outer frames,

(2) the outer frames and the corner parts are assembled together by using screws, so that the case is easy to disassemble,

- (3) the outer panels are removably installed by using screws on outside of the corner parts of the frame members,
- (4) a disk-drive bay in which a plurality of large and small disk drives serving as internal and external storage modules can be installed under the condition that they are stacked, with the disk-drive bay comprising:
 - (i) a pair of left-side and right-side first angle panels that (a) sustain the large drive from their respective sides, and (b) affixed to a bottom face of a bay-fixing panel that is affixed to an outer frame that forms a top plane of the case, and
 - (ii) left-side and right-side third angle panels that (a) sustain a small disk drive that is stacked on a bottom part of the large disk drive from its respective sides, and (b) are affixed respectively to the left-side and right-side first angle panels that are arranged at the bottom part of the large disk drive, and
- (5) the large and small disk drives are assembled, being affixed by using screws to the pair of the left-side and right-side first panels and the pair of the left-side and right-side third angles, so that the case is easy to disassemble.

REMARKS

Applicant appreciatively notes that claims 6-10 are indicated as allowable.

Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

In this Amendment, claims 1, 4, 11 and 12 have been deleted without any prejudice and/or disclaimer. Claims 2, 5, and 6 have been amended to more clearly define the claimed invention. New claim 13 has been added to provide Applicant with the scope of protection to which he is believed entitled. No new matter has been introduced through this Amendment.

Claim Rejections under and 35 U.S.C §103:

The Examiner has rejected claims 1 and 5 under 35 U.S.C 103(a) as being unpatentable over Chien (US 6168249) (hereinafter "Chien"). Claims 2-4, 11 and 12 have been rejected under 35 U.S.C 103(a) as being unpatentable over Yuan et al. (US 6920042) (hereinafter "Yuan") in view of Chien.

It is respectfully submitted that amended claim 2 is patentable over the applied art of record at least because of the following reasons:

The peripheral device module 40 of Yuan is modularized, in that, the peripheral device module 40 appears to correspond to the third unit case of the claimed embodiment. However, the structure for assembling the second and third unit case of the claimed embodiment is different from the structure of Yuan. In addition, the claimed embodiment has six outer panels of the second and third unit cases having rectangular parallelepiped shapes that are attachable and detachable, i.e., exchangeable. This feature is not deemed disclosed in the Yuan reference. For example, depending on the power source or the amount of heat generated in a HDD, one part or all of the outer panels of the embodiment may be formed using punching metal etc., so that enhanced heat release property is achieved.

At least because of the above reasons, a person having ordinary skill in the art would not be motivated to properly combine the teachings of Yuan reference with that of Chien to arrive at the claimed invention.

Further, claim 3 depends on amended claim 2 and hence is believed patentable over the applied art of record at least for the reasons advanced above with respect to claim 2.

Further, claim 5 has been amended to include the features of claim 6 and since claim 6 has been indicated as allowable, amended claim 5 is believed patentable over the applied art of record.

Patentability of new claim

New claim 13 corresponds to the fourth embodiment illustrated in Figs. 25-27 and as is apparent, claims several distinctive features which are not disclosed by the applied art of record. Therefore, new claim 13 is believed patentable over the applied art of record.

All rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN HAM & BERNER, LLP



Kenneth M. Berner
Registration No. 37,093

1700 Diagonal Road, Suite 300
Alexandria, Virginia 22314
(703) 684-1111
(703) 518-5499 Facsimile
Date: June 16, 2008
KMB/SOM/cac